T BOOK

sions		Contents	Reference to last Measurement
Breadth 5	Depth 6	7	8

M. A. R. 57 (Rule 116)
Measurement Book

No. B

Premeasurements:

Serial No. 1st and final bill

Name of Work Replacement of UGD ~~From~~ pipeline at ~~To~~ Kodigehalli in ward no 08

497632

Name of Contractor of nature of Agency Kodigehalli

Date of commencement of work → M/S. KRIDL

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Est cost:-	15.00 lakhs.					
	Job number:-	008-18-000090					
	Head of account:-	P3295					
	A.S. NO:-	AS/CE(YNK)/117/18-19; dt: 01-02-19					
	T.S. NO:-	TS/CE(YNK)/109/18-19; dt: 01-02-19					
	Agro no:-	No. BBMP/EE/BTP/00/259/18-19; dt: 08-03-19					
	Work order no:-	NO. BBMP/EE/BTP/00/259/18-19; dt: 08-03-19.					
	Work order amount:-	Rs. 14,82,345 (Including KRIDL charges).					

MEASUREMENT BOOK

MAIN-BILL:-

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No.01:- Excavating for pipe line trenches of required width by mechanical & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting shoring, strutting, dewatering etc, in all kinds of soil mixed with boulders of 30 cms size;						
	Qty vide page no. 497633 →					241.38 cum	
	At the rate of Rs. 167.00 →					40310.46	
	Item No. 1(b):- Pipes of all dia for depth 2.0 to 4.0 m in all types of soils.						
	Qty vide page no. 497635 →					169.57	
	At the rate of Rs. 225.00 →					38153.25	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	Item No.2:- Excavat
	and manual means
	barricading, dang
	disintegrated roc
	comprising, lie
	(a) for depth upto
	Qty vide page
	At the rate o

ENT BOOK

imensions			Contents	Reference to last Measurement
h	Breadth 5	Depth 6	7	8
				trenches of required width including dressing sides, barricading, danger lighting etc, in All kinds of soil 3f.); → 241.38 cum	40310.46
				th 2.0 to 4.0 m in all 169.57	38153.25

M. A. R. 57 (Rule 116)
Measurement Book

No. B .497643

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No. 2:- Excavating for pipe line trenches of required width by mechanical and manual means including dressing sides, ramming of bottoms, pronding barricading, danger lighting, shoring, strutting, dewatering etc, in disintegrated rock, soft rock, soft shale and medium hard rock comprising, fissured rock: without resorting to blast etc,						
	(a) For depth upto 2m:-						
	Qty vide page no. 497635 →				47.99 cum		
	At the rate of Rs. 404.00 →						19387.96

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No. 2 (b):- For depth 2m to 4m:-						
	Qty vide page no.	49763	4 →	36.77 cum			
	At the rate of Rs.	460.00 →				16914.20	
	Item No. 03:- Excavating for pipe line trenches of required width by mechanical, and manual means including dressing sides, ramming of bottoms, providing barricading, in hard rock by chistelling to propes slope etc,						
	(a) Pipes of all dia for depth upto 2m:						
	Qty vide page no	49763	5 →	32.04 cum			
	At the rate of Rs.	1487.00 →				47643.48	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	N
1	2	
	(b) For depth 2.0 to 4.0m:	
	Qty vide page no.	
	At the rate of Rs.	
	Item No. 04:- Refilling e	
	20 cms in depth, compac	
	upto 95% maximum d	
	restoration of roads	
	machineries, complete	

REMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
m:-				
634 →	36.77 cum			
0 →			16914.20	
e line trenches of required width				
al means including dressing sides				
ing barricading, in hard rock				
slope etc,				
th upto 2m:				
635 →	32.04 cum			
7.00 →			47643.48	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 497644

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	(b) For depth 2.0 to 4.0m:						
	Qty vide page no. 497635 →				24.83 cum		
	At the rate of Rs. 1602.00 →						39777.66
	Item No. 04:- Refilling of earth around pipelines in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after upto 95% maximum dry density (modified heavy proctor test) for restoration of roads without settlement including HOM of machineries, complete.,						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Qty vide ~~page~~ No.	497637	→	391.05			
	At the rate of Rs.	103.00	→			40278.15	
	Item No.05:- cutting road surfaces for pipelines trenches and disposing of the excavated stuff as directed., for macadam.						
	Qty vide page no.	497638	→	45.96 cum			
	At the rate of Rs. 859.00		→			39479.64	
	Item No.06:- Providing and laying in position plain cement concrete of mix 1:3:6 with OPC @ 220 kgs, with 20mm & down size graded granite metal coarse aggregates @ 0.69 cum						

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency ...
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	and fine aggregate not exceeding 15cm, including cost of al
	Qty vide page
	At the rate of
	Item No.07:- providing trenches for follow to withstand all typ

OOK

th	Depth 6	Contents 7	Reference to last Measurement 8
	91.05		
		40278.15	
	ipelines trenches and		
	directed., for		
	5.96 cum		
		39479.64	
	osition plain cement		
	kge, with 20mm & down		
	se aggregates @ 0.69 cum		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 497645

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	and fine aggregates @ 0.56 cum, machine mixed, concrete laid in layers not exceeding 15cm, th, well compacted in foundation, plinth & cills, including cost of all materials.						
	Qty vide page no. 497638 →					27.57 cum	129275.73
	At the rate of Rs. 4689.00 →						
	Item No. 07:- providing and installing sheet piling for both sides of the trenches for following depths with mild steel sheets of not less than to withstand all types of soils, max depth as per the approved design						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	drawings, including labour charges.						
	Qty vide page no. 497638 →			183.908 sqm			
	At the rate of Rs. 531.00 →					97650.90	
	Item No.08:- casting of excavated earth of all types upto a distance mentioned below and recasting back the earth to the same site by vehicle including loading, unloading charges.						
	Qty vide page no. 497639 →			200 cum			
	At the rate of Rs. 335.0 →					67000.00	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	Item No.09:- Disposal ~~Casting~~ e
	below and recasting
	loading, unloading c
	Qty vide page no
	At the rate of R
	Item No.10:- supplying
	NP-3 class confirmi
	ordinary portland ce

NT BOOK

nensions			Contents	Reference to last Measurement
	Breadth 5	Depth 6	7	8
harges.)				
→ 183.908qm			97650.90	
earth of all types upto a				
recarting back the earth				
cluding loading, unloading				
→ 200 cum			67000.00	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 497646

Serial No. ..... From..... To.....

Name of Work .....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No.09:- Disposal ~~Casting~~ of excess excavated earth of all types upto a distance mentioned below and recarting back the earth to the same site by vehicle including loading, unloading charges.)						
	~~Qty~~ vide page no. 49763/9 →			151.85 cum			
	~~At~~ the rate of Rs ~~235~~ 243.50 →						36899.55
	Item No.10:- supplying SS & RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 class confirming to IS-458:1988 with latest amendments using ordinary portland cement, for sanitary works and conveying to work site						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations & jointing of pipes and specials including cost of specials, perfect linking of joints with jack to correct position including cost of jointing materials etc., complete.						
	RCC NP3 class pipe of 400mm dia:						
	Qty vide page no 497640 →		178.90				
	Amt the rate of Rs. 1953.00 →					349391.70	

Serial No. .....
Name of Work .....
Name of Contractor of nature of
Date of commencement of work

Date	Full description, etc,
1	2
	Item No. 11(a):- P
	using sulphate
	foundation.
	dia and 2-0m
	Qty vid
	Amt the
	11(b):- depth
	Qty vi

T BOOK

sions		Contents	Reference to last Measurement
Breadth 5	Depth 6	7	8
ying true to line and level			
at both destinations &			
ding cost of specials,			
to correct position			
als. etc., complete.			
8.90 cum			
		349391.70	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 497647

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No.11(a):- Providing and constructing using sulphate resistant cement, concrete foundation. constructing brick masonry dia and 2.0m depth include SFRC&C					Wire cut brick manhole chambers in shape at top, with CC 1:3:6 circular manholes 1.2m internal	
	Qty vide page no. 497640 →					01no	
	At the rate of Rs. 30795.00 →						30795.00
	11(b):- depth above 2m and below 3m						
	Qty vide page no. 497640 →					01no	
							14166.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	At the rate of Rs. 14166.00 →					14166/-	
Item. 11(c):-	Constructing brick masonry circular manholes 1.2m internal dia & 3.0m depth include SFRC & e.						
	Qty vide page no. 497641 →	5 nos					
	At the rate of Rs. 44961.00 →					224805.00	
Item No. 12:-	Conducting the level and strip of survey of alignment of main sewers of required diameter including all data required for generating GIS map of sewer networks, preparation and submission of plan and LS with GL						

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	at 30m intervals and etc, showing the righ complete.
	Qty vide page n
	At the rate of R
Item No. 13:-	Pending barricading using fixed vertically at

BOOK

ns		Contents	Reference to last Measurement
eadth 5	Depth 6	7	8
		14166	
rcular manholes 1.2m			
FRC & e.			
nos			
		224805.00	
of survey of alignment			
r including all data			
of sewer networks,			
n and LS with GL			

M. A. R. 57 (Rule 116)
Measurement Book

No. B 497648

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	at 30m intervals and junction points along the centre line of the alignment etc, showing the right of way any permanent features, culverts, branch						
	complete.						
	Qty vide page no 497641 →			183.90 m			
	At the rate of Rs 28.00 →						5149.20
	Item No. 13:- Providing, erecting and removing each using a pole three ties barricading using poles of 7.5 to 10 cms dia., and 1.5m ht above ground fixed vertically at intervals of 2 to 2.5m centre to centre and horizontaly						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	at 0.5m above GL, max depth of 0.3m and tied with coir, rope firmly including cost & conveyances.;						
	Qty vide page no. 497 642 →		183.90 days.				
	At the rate of Rs. 52.00 →					9562.80	
Item No. 14:-	construction of granular sub-base by providing close graded crushed stone aggregates of granite/trap/ basalt material, mixing in a mechanical mix plant at OMC. Plant mix method for grading-II material.						
	Qty vide page no. 497 642 →		36.78 cum				
	At the rate of Rs. 2171.90 →					79882.48	

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2
	Item No. 15:- Providing, la aggregates of granite/ tions including prem mechanical mix plant on well prepared surfa to achieve the desired
	Qty vide page no.
	At the rate of Rs.

Assistant Executive En
Kodigehalli Sub Divi

BOOK

adth 5	Depth 6	Contents 7	Reference to last Measurement 8
		and tied with coir,	
		yances:,	
		83.90 days.	
			9562.80
		b-base by providing	
		rgates of granite/trap/	
		nechanical mix plant	
		ading -ii material.	
		36.78 cum	
			79882.48

M. A. R. 57 (Rule 116)
Measurement Book

No. B

497649

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No.15:- Providing, laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, on well prepared surface and compacting with vibratory roller to achieve the desired density complete.						
	Qty vide page no. 497642 →					27.57 cum	
	At the rate of Rs. 1667.00 →						45959.19

Certified that the work is done as per specifications.

Assistant Executive Engineer
Kodigehalli Sub Division.

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
			Total=		1372482.35		
	GST charges @ 12% (SI No. 6 & 15-16)=				30614.09		
	Add 4% KRIDL charges=				54899.29		
	Add 1.5% third party inspection charges=				20587.24		
	Grand total=				1478582.95		
	R1 = 1457905-00						

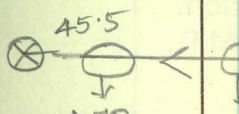
Verified
[illegible]
[illegible].N.D
AE(NR)
I/C
20/5/19

Assistant Executive Engineer,
Kodigehalli Division,
Yelahanka [illegible] S.M.P.,
Bangalore.

Assistant Executive Engineer
Byatarayanapura Sub-Division,
KRIDL, BBMP, Bangalore

Serial No. .....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work
1	2



BOOK

dth	Depth 6	Contents 7	Reference to last Measurement 8
	1372482·35		
	30614·09		
	54899·29		
	26587·24		
	·95		
	705-00		

tive Engineer,
Division,
B.M.P.,
.e.

M. A. R. 57 (Rule 116)
Measurement Book

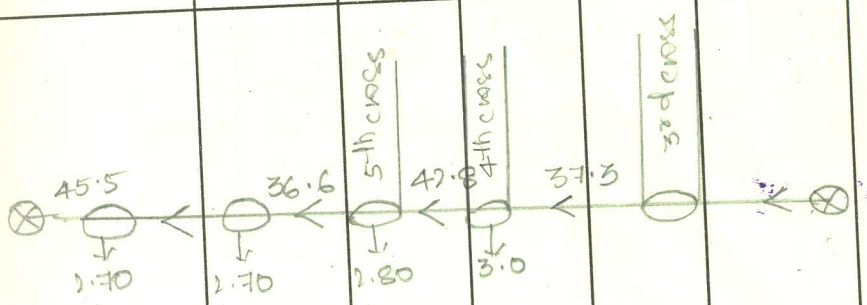
No. B

497650

Serial No. ..... From..... To.....
Name of Work .....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

N

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8



Totally N.D
Declared

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Certificate:-						
1)	Certified that the contractor has done the works satisfactorily.						
	Astplly. N.D At W&(P/C)						

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore

Serial No. .....
Name of Work .....
Name of Contractor of natur
Date of commencement of w

Date	Full description, e
1	2

BOOK

ons		Contents	Reference to last Measurement
readth 5	Depth 6	7	8
done the work			
ve Engineer, b Division, , B.B.M.P., ore			

R. 57 (Rule 116)
asurement Book

No. B

497651

Serial No. .....
Name of Work ..... n..... To.....
Name of Contractor of nature of Age .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	1st and final Bill.					Total Rs: 14.57,905-00	
	ಬಿಲ್ಲು ಮೊಬಲಗು ರೂ 14.57,905-00					IT - 29160-00	
	ಗಣ ಪಾವು ಮಾಡಿದೆ : ಇದರಲ್ಲಿ ರೂ 1526 11-00.					CH. 14580-00	
	ದಾಣಕೆ ಮಾಡಿಕೊಂಡು ಉಳಿದ ಮೊಬಲಗು, 13.05,384-00					CBF - 1458-00	
	Rs: Thirteen Lakh five Hundred eight four only,					LR - 8477-00	
	ಕ್ಕ ಮುಖಾಂತರ ನಿಡಲಾಗಿದೆ					FSD - 7290-00	
	ಲೆಕ್ಕಾಧೀಕ್ಷಕರು					CGST - 13018-00	
	ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ವಿಭಾಗ ಪೂ. ಬೆ. ಮ. ಪಾ					SGST - 13018-00	
						Adju - 152611-00.	
						Cheque Rs: 13,05,384-00	